INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2003/000826

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C25C 7/02, C25C 1/16, C25B 9/02
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C23C, C25B, C25C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA PAJ

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| Х | US 4015099 A (WILLIAM SENIUK ET AL), 29 March 1977 (29.03.1977), figure 4, claim 1, abstract | 1-23 |
| | | |
| A | US 2790656 A (L.A. COOK), 30 April 1957 (30.04.1957), column 3, line 56 - column 4, line 41 | 1-23 |
| | | |
| Α · | US 4035280 A (RICHARD DEANE ET AL), 12 July 1977 (12.07.1977), figure 1 | 1-23 |
| | | · |
| A | EP 0376447 A1 (ZIMCO INDUSTRIES (PROPRIETARY) LIMITED), 4 July 1990 (04.07.1990), abstract | 1-23 |
| | · | |

| | | | <u></u> |
|-----|--|-----|--|
| * | Special categories of cited documents: | #T* | Taken de manual at 121 to 1 a and 1 and 1 a an |
| | document defining the general state of the art which is not considered to be of particular relevance | 1 | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| *E* | earlier application or patent but published on or after the international filing date | "X" | document of particular relevance: the claimed invention cannot be |
| | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other | | considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| | special reason (as specified) | "Y" | document of particular relevance: the claimed invention cannot be |
| | document referring to an oral disclosure, use, exhibition or other means | | considered to involve an inventive step when the document is combined with one or more other such documents, such combination |
| "P" | dominant published with a state of the state | | being obvious to a person skilled in the art |

document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

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10 February 2004

Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM

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| | | PCT/FI 2003/000826 |
|-------------|--|-----------------------------------|
| | ation). DOCUMENTS CONSIDERED TO BE RELEVANT | |
| Category* | Citation of document, with indication, where appropriate, of the relev | rant passages Relevant to claim N |
| A | DE 3323516 A1 (HAPAG-LLOYD WERFT GMBH), 9 August 1984 (09.08.1984), abstract | 1-23 |
| | | |
| A | GB 2252569 A (BICC PUBLIC LIMITED COMPANY), 12 August 1992 (12.08.1992), abstract | 1-23 |
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INTERNATIONAL SEARCH REPORT

Information on patent family members

24/12/2003

International application No. PCT/FI 2003/000826

| | | | | | | |
|----|---------|----|------------|----------|---------------------|------------|
| US | 4015099 | Α | 29/03/1977 | ΑU | 7773675 A | 05/08/1976 |
| | | | ,, | BE | 828189 A | 18/08/1975 |
| | | | | CA | 1018477 A | 04/10/1977 |
| | | | | DE | 2506285 A,B,C | 06/11/1975 |
| | | | | ES | 434633 A | 01/02/1977 |
| | | | | FI | 60246 B,C | 31/08/1981 |
| | | | | FĪ | 750494 A | 30/10/1975 |
| | | | | JP | 976756 C | 30/10/1979 |
| | | | | JP | 50141520 A | 14/11/1975 |
| | | | | JP | 54007603 B | 09/04/1979 |
| | | | | NL | 165228 B,C | 15/10/1980 |
| | • | | | NL | 7503125 A | 31/10/1975 |
| | | | | NO | 751509 A | 30/10/1975 |
| | | | | ZA | 7500576 A | 28/01/1976 |
| US | 2790656 | A | 30/04/1957 | NONE | | |
| US | 4035280 | Α | 12/07/1977 | AU | 8691875 A | 02/06/1977 |
| | | | ,,, | BE | 836102 A | 16/03/1976 |
| | | | | BG | 39114 A | 15/04/1986 |
| | | | | CA | 1034533 A | 11/07/1978 |
| | | | | DE | 2553032 A,B,C | 10/06/1976 |
| | | | | ES | 442975 A | 16/04/1977 |
| | | | | FI | 58356 B,C | 30/09/1980 |
| | | | | FI | 753270 A | 29/05/1976 |
| | | | | FR | 2292779 A,B | 25/06/1976 |
| | | | | GB | 1490309 A | 02/11/1977 |
| | | | | ΙŢ | 1056286 B | 30/01/1982 |
| | | | | JP | 1084958 C | 25/02/1982 |
| | | | | JP | 51077503 A | 05/07/1976 |
| | | | | JP . | 56025277 B | 11/06/1981 |
| | | | | MX | 3226 E | 28/07/1980 |
| | | | | NL | 169351 C | 01/07/1982 |
| | | | | NL | 7513406 A | 01/06/1976 |
| | | | | NO | 142179 B,C | 31/03/1980 |
| | | | | NO | 753835 A | 31/05/1976 |
| | | | | PL TD | 107694 B | 29/02/1980 |
| | | | | TR YU | 18566 A | 11/04/1977 |
| | | | | YU | 39753 B 300375 A | 30/04/1985 |
| | | | | | 3003/3 A | 30/06/1982 |
| EP | 0376447 | A1 | 04/07/1990 | AU | 4385689 A | 03/05/1990 |
| | | | | CA | 2001533 A | 30/04/1990 |
| | | · | | ZA | 8908119 A | 25/07/1990 |
| DE | 3323516 | A1 | 09/08/1984 | NONE | | |
| GB | 2252569 | Α | 12/08/1992 | AU | 1038092 A | 13/08/1992 |
| | _ | • | , | FR | 2672439 A | 07/08/1992 |
| | | | | GB | 9102562 D | 00/00/0000 |
| | | | | GB | 9202213 D | 00/00/0000 |
| | | | | IT | 1254297 B | 14/09/1995 |
| | | | | ΙŢ | RM920078 D | 00/00/0000 |
| | | | | ZA | 9200519 A | 30/12/1992 |